

Explanation of Soil Test Pit Log Forms

These forms have been prepared to assist consultants in collecting soil information per Sections 1-902 and Appendix 2-A in the Wastewater System and Potable Water Supply Rules effective September 29, 2007. The consistent format will also streamline the review of test pit logs by Drinking Water & Groundwater Protection Division personnel.

<u>Depth</u>	The depth should always be measured from ground surface and the interval of the layer being described noted.
<u>Texture</u>	The grain size distribution should be estimated in this column; the relative percentages of sand, silt and clay should be recorded using a consistent and accepted system. The USDA Soil Conservation Service soil textural classification is preferred. Occurrence of gravel, larger rock fragments or bedrock should also be noted here.
<u>Consistence</u>	The in place relative cohesion of soil particles to each other and the degree of compactness of the soil layer. Useful tests include degree of penetration with a sharp object or how readily soil peds break (e.g. loose, friable, firm or very firm).
<u>Color</u>	The predominant color or colors of the soil layer should be described as accurately as possible (such as brown, reddish-yellow, olive gray, dark gray, etc.). Munsell Color Chart codes are also useful.
<u>Mottles or Redoximorphic Features</u>	The spots or splotches of different colors of different shades of color should be noted in terms of their quantity, size and contrast (for example: gray and yellowish-brown, common, distinct). Redoximorphic features (RMF) are a color pattern in a soil due to loss (depletion) or gain (concentration) of pigment compared to the matrix color.
<u>Structure</u>	The natural arrangement of soil particles into aggregates that results from pedogenic processes. Record the Type, Grade, and Size. Type options include granular, angular blocky, subangular blocky, platy, wedge, prismatic and columnar; or structureless options of single grain or massive. Grades include structureless, weak, moderate and strong. Size ranges from very fine, fine, medium, coarse, very coarse and extra coarse.
<u>Comments</u>	Other pertinent soil characteristics such as moisture content, rock fragment content, probable depositional environments, and explanations of soil characteristics listed in other columns.